

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
29 September 2005 (29.09.2005)

PCT

(10) International Publication Number
WO 2005/090988 A3

(51) International Patent Classification⁷: **G01N 33/569**,
33/68

(21) International Application Number:
PCT/GB2005/001062

(22) International Filing Date: 21 March 2005 (21.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0406271.7 19 March 2004 (19.03.2004) GB

(71) Applicant (for all designated States except US): **ISIS IN-
NOVATION LIMITED** [GB/GB]; Ewert House, Ewert
Place, Summertown, Oxford OX2 7SG (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **LALVANI, Ajit**
[GB/GB]; Nuffield Department of Clinical Medicine, John
Radcliffe Hospital, Headington, Oxford OX3 9DU (GB).

(74) Agents: **ROQUES, Sarah, Elizabeth et al.**; J.A. Kemp
& CO., 14 South Square, Gray's Inn, London WC1R 5JJ
(GB).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
2 February 2006

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: MYCOBACTERIUM TUBERCULOSIS INFECTION DIAGNOSTIC TEST

(57) Abstract: The invention provides a method of diagnosing *Mycobacterium tuberculosis* infection in a human, or of determining whether a human has been exposed to *Mycobacterium tuberculosis*, comprising: (i) contacting T-cells from said human with one or more of (a) a peptide having the sequence shown in SEQ ID NO: 1; (b) a peptide having or comprising the sequence of at least 8 consecutive amino acids of the sequence shown in SEQ ID NO: 1; or (c) a peptide having or comprising a sequence which is capable of binding to a T-cell receptor which recognises a peptide as defined in (a) or (b); and (ii) determining whether any of the said T-cells recognise said peptide, wherein steps (i) and (ii) are optionally carried out *in vitro*.



WO 2005/090988 A3